

TARASOV, B.P., inzh.

Mechanical double-lever log kickers used for storehouse log hauling.  
Der.prom. 7 no.9:26 S '58. (MIRA 11:11)

1. Dyat'kovskiy domostroitel'nyy kombinat.  
(Sawmills)

TRAPEZNIKOV, N.N., kand. med. nauk (Moskva V-311, 1-ya ul. Stroitaley  
d.6, korp.5, kv.6); TSESHKOVSKIY, M.S.; TARASOV, B.P.

Treatment of patients with osteogenic sarcomas. Ortop., travm.  
i protez. 26 no.5:32-37 My '65. (MIRA 18:10)

1. Iz Instituta eksperimental'noy i klinicheskoy onkologii AMN  
SSSR (dir. - deystvitel'nyy chlen AMN SSSR prof. N.N. Blokhin)  
i Gor'kovskogo instituta travmatologii i ortopedii (dir. -  
dotsent M.G. Grigor'yev).

TARASOV, B.V.

Recent data on the bottom configuration of the Arctic Ocean. Probl.  
Arkt. i Antarkt. no.8:89-90 '61. (MIRA 15:3)  
(Arctic Ocean--Submarine topography)

UMANSKIY, L.I.; TARASOV, B.V.; KOVALENKO, A.V.

Universal portable apparatus for study and demonstration of the  
psychophysiological peculiarities of man. Vop.psikhol. 7 no.3:  
171-176 My-Je '61. (MIRA 14:6)

1. Kurskiy pedagogicheskiy institut.  
(Physiological apparatus)

L 10689-65 EWT(1)/FGC ASD(a)-5/ESD(dp)/AFETR GW

S/3116/63/253/000/0132/0137

ACCESSION NR: AT404/486

AUTHOR: Borisenkov, Ye. P.; Tarasov, B. V.

TITLE: Automatic plotting of pressure pattern charts by a letter and digit plotter

SOURCE: Leningrad. Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy Institut. Trudy\*, v. 253, 1963. Sbornik statey, posvyashchennykh pamyati V. V. Frolova; voprosy gidrometeorologii polarnykh oblastey (Collection or articles in memory of V. V. Frolov; problems in the hydrometeorology of the polar regions), 132-137

TOPIC TAGS: meteorology, atmospheric pressure pattern chart, meteorological data plotter, electronic computer

ABSTRACT: The authors review the various means by which meteorological charts are plotted automatically, with emphasis on the methods used in the United States and Sweden. Certain shortcomings or limitations of these methods are noted. During the past two years, the authors and their colleagues have been attempting to automate the process of collection and analysis of data using a "Ural-2" electronic computer. This article does not discuss the methods used there for objective analysis; only the automatic plotting of pressure pattern charts by a letter and digit plotter are described. As a result of objective analysis or

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ACCESSION NR: AT4046486

numerical forecasting, the values of a meteorological element are available for the intersections of a regular square grid system. These values are fed to the memory units of an electronic computer. The grid used measures 20 x 20 grid squares, with 2.4 cm between points; the real distance between the points is 240 km. The program for obtaining the isolines and selection by the plotter is rather simple and involves only 200 commands. The printing of 12 charts, involving the input of the program and numerical data and its conversion into a binary code, requires about 20 minutes. Assuming that the necessary data are already stored in the memory units of the electronic computer, the plotting of 1 chart requires about 1 minute. The maximum possible width of a chart is 50 cm, but it can have any length; width can be extended by gluing chart sheets together. The results described are the first Soviet attempt at automatic plotting of weather charts. Figures 1 and 2 of the Enclosure illustrate the process. Orig. art. has: 1 formula and 3 figures.

ASSOCIATION: Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy institut, Leningrad (Arctic and Antarctic Scientific Research Institute)

SUBMITTED: 00

ENCL: 04

SUB CODE: ES

NO REF SOV: 001  
Card 2/6

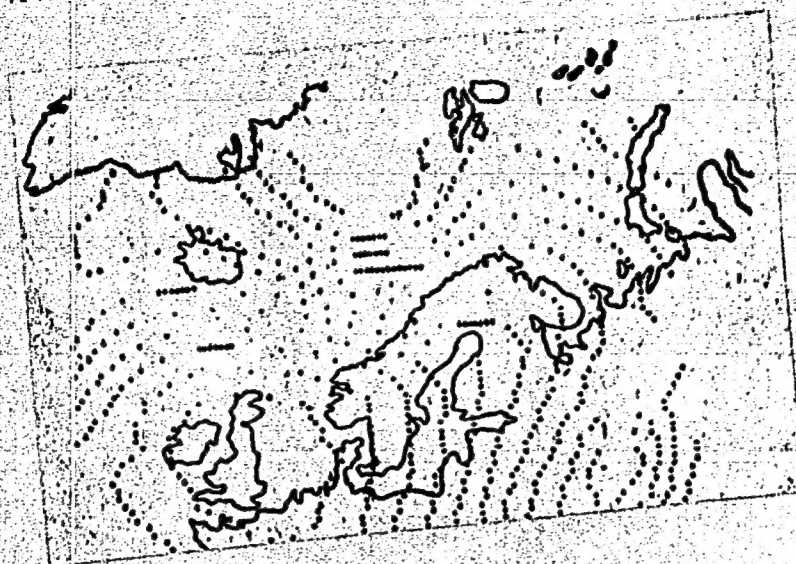
OTHER: 009

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ACCESSION NR: AT4046486

Fig. 1.

ENCLOSURE: 01



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ENCLOSURE: 02

Continuation of Fig. 1.

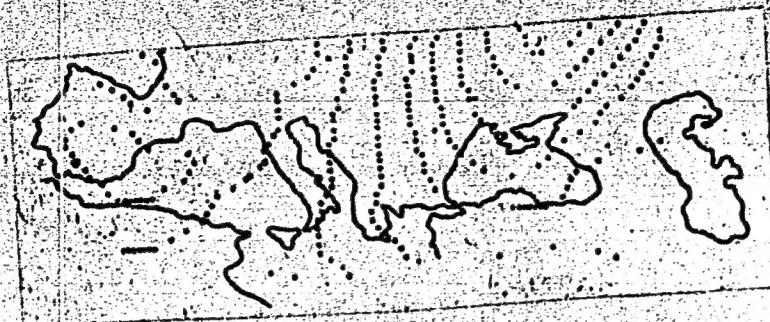


Fig. 1. Absolute pressure pattern chart of the 700-mb surface for 0600 hours on 7 September 1953, plotted by computer.  
Card 4/6

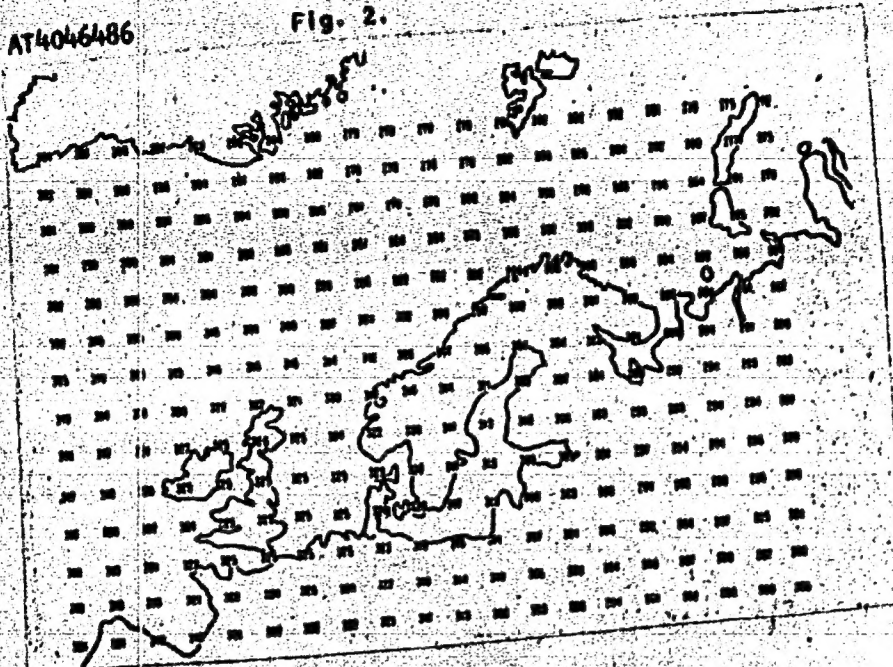


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Fig. 2.

ENCLOSURE: 03



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ENCLOSURE: 04

Continuation of Fig. 2.

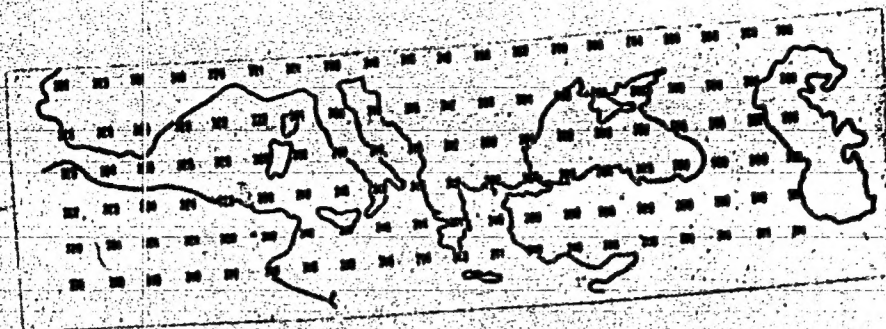


Fig. 2. Values of heights of absolute pressure pattern for 700-mb surface for 0600 hours on 7 September 1953, plotted at intersections of a regular grid.  
Card 6/6

TARASOV, B.V.

USSR - A

Problems of chemical stability of glass. O. K. BORVISKIN AND B. V. TARASOV. *Steklo i Keram.* 11 (6) 12-14 (1954). -- Chemical stability was determined with glass powders (in the system  $\text{Na}_2\text{O}-\text{SiO}_2-\text{ZrO}_2$ ) which were heated and cooled in an autoclave. Chemical stability of the glass was characterized by weight loss after drying and the amount of water retained by the hydrate film. All the glasses formed a mechanically stable hydrated film which liberated water only at  $450^\circ$  to  $600^\circ\text{C}$ . All oxides in the glass passed into solution; but their proportion varied; first to pass into solution was  $\text{Na}_2\text{O}$ .  $\text{SiO}_2$  came off the surface compounds in large amounts. The amount of  $\text{ZrO}_2$  in solution was very small. The film contained all compounds of the glass, but the chief components on the surface were the hydrated compounds of Zr. The individual structural components were  $\text{SiO}_2$ ,  $x\text{Na}_2\text{O} \cdot m\text{SiO}_2$ ,  $q\text{Na}_2\text{O} \cdot p\text{ZrO}_2$ ,  $x\text{SiO}_2$ , and  $x\text{Na}_2\text{O} \cdot y\text{ZrO}_2 \cdot z\text{SiO}_2$ ; the magnitude of the coefficients and the relative amounts of the compounds depended on the composition of the glass. Tests with vitreous quartz show that at  $310^\circ\text{C}$ ,  $\text{SiO}_2$  dissolves. Rate of solution of quartz glass is much more than that of other glasses so that aggregates of  $\text{SiO}_2$  do not form a protective film. Aggregates of the type  $x\text{Na}_2\text{O} \cdot m\text{SiO}_2$  are probably the least stable structural elements. Aggregates of the type  $q\text{Na}_2\text{O} \cdot p\text{ZrO}_2$  should be subject to hydrolysis the same as Na silicates, with NaOH passing into solution. The high stability of  $\text{ZrO}_2$  indicates that  $\text{H}_2\text{ZrO}_3$  is adsorbed and retained by the surface film. Aggregates of the type  $x\text{Na}_2\text{O} \cdot y\text{ZrO}_2 \cdot z\text{SiO}_2$  decompose into more simple compounds. The mechanism of destruction of high-Zr glasses proceeds as follows: At first, the easily hydrolyzable compounds are destroyed, i.e.,  $x\text{Na}_2\text{O} \cdot m\text{SiO}_2$  and  $q\text{Na}_2\text{O} \cdot p\text{ZrO}_2$ , with NaOH and partly  $\text{H}_2\text{SiO}_3$  pass into solution; the surface film, consisting now mostly of  $\text{SiO}_2$ , adsorbs  $\text{H}_2\text{ZrO}_3$  and partly  $\text{H}_2\text{SiO}_3$ ; then the surface film becomes rich in difficultly soluble compounds of  $\text{ZrO}_2$  and the  $\text{SiO}_2$  goes into solution; destruction is then retarded. B.Z.K.

TARASOV, B. V.

USSR/Chemistry - Glass production

Card : 1/1 Pub. 104 - 6/12

Authors : Botvinkin, O. K., Dr. Chem. Sci.; and Tarasov, B. V.

Title : Industrial fusion of glasses containing zirconium

Periodical : Stek. i ker. 11/7, 18, June 1954

Abstract : The problem of producing a glass that will substitute mica is dealt with. Details are given of experimentation conducted in order to obtain a glass of high zirconium content and still transparent. Graph.

Institution : ...

Submitted : ...

TARASOV, B. V.

AID P - 2908

Subject : USSR/Electricity

Card 1/1 Pub. 26 - 5/32

Authors : Botvinkin, O. K., Dr. Chem. Sci.; G. Ya. Ioffe, Eng.;  
L. B. Krol', Kand. Tech. Sci.; B. V. Tarasov, Kand.  
Tech. Sci.

Title : Chemically-resistant glass for peepholes of high  
pressure boilers

Periodical : Elek.sta., 7, 19-21, J1 1955

Abstract : The article mentions the inadvisability of using  
"pyrex" glass and the exorbitant cost of muscovite  
for peepholes of high pressure boilers. Detailed  
descriptions of the components and properties of the  
types of glass designed to withstand temperature and  
high pressure resulting from the operation of boilers  
are given. Four diagrams.

Institution : None

Submitted : No date

TARASOV, B. V.

15  
4  
Production of transitional glass connection. O. K. Bo-  
vinkin, B. V. Tarasov, and V. M. Desorova. *Prilozhenie k*  
*izvestiya Akad. Nauk SSSR, Seriya Khim. Nauk* 1957, No. 1, 119-21. The authors  
describe the prepn. of 18 transitional connections between  
quartz and glass which cover a range of the linear expansion  
coeffs. from  $5 \times 10^{-7}$  to  $89 \times 10^{-7}$ . The softening temp.  
of the transitional material is gradually lowered as the ex-  
pansion coeff. increases, which permits one to prep. vacuum-  
tight and mechanically stable connections of quartz to glass.  
The process is based on changing gradually the ratio of the  
junction components  $\text{SiO}_2$ ,  $\text{B}_2\text{O}_3$ ,  $\text{Al}_2\text{O}_3$ ,  $\text{CaO}$ ,  $\text{MgO}$ ,  $\text{K}_2\text{O}$ ,  
and  $\text{Na}_2\text{O}$ . A. Kremheller

*A. U. Sci Res Inst. Glass*

SOV/124-58-4-4905

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 4, p 169 (USSR)

AUTHORS: Rogozhin, Yu. V., Syritskaya, Z. M., Tarasov, B. V.

TITLE: Investigation of Microhardness of Various Types of Glass  
(Issledovaniye mikrotverdosti razlichnykh stekol)

PERIODICAL: Tr. Vses. n.-i. in-t stekla, 1957, Nr 37, pp 71-76

ABSTRACT: Bibliographic entry

1. Glass--Properties    2. Glass--Test results

Card 1/1

BOTVINKIN, O.K.; TARASOV, B.V.; SESOROVA, V.N.

Manufacturing transition glasses and vacuum-sealing junctions.  
Biul.tekh.-ekon.inform. no.9:39-40 '58. (MIRA 11:10)  
(Glass-metal sealing)



ACCESSION NR: AP4028417

S/0181/64/006/004/0981/0985

AUTHORS: Volkov, D. I.; Tarasov, B. V.; Zelentsova, S. A.

TITLE: Magnetic properties of glass containing additions of manganese, cobalt, and nickel

SOURCE: Fizika tverdogo tela, v. 6, no. 4, 1964, 981-985

TOPIC TAGS: glass, magnetic susceptibility, temperature dependence, Curie law, Curie Weiss law

ABSTRACT: The temperature dependence of the magnetic susceptibility of glass containing up to 13.6% Mn, 14.6% Co, and 14.5% Co was measured. The initial glass (without addition of Mn, Co, or Ni ions) was diamagnetic, with a susceptibility of  $-0.35 \cdot 10^{-6}$ , practically independent of temperature. With the addition of the indicated ions, the glasses became paramagnetic and strongly temperature dependent. The reciprocal of the susceptibility proved to depend linearly on the temperature for all compositions of glass tested, but it was found not to be zero at absolute zero. This means that the relation does not simply follow the Curie law, but is rather expressed by the Curie-Weiss law:  $\chi = \frac{C}{T-\theta}$ , where  $\chi$  is the susceptibility,

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ACCESSION NR: AP4028417

C the Curie constant, T the absolute temperature, and  $\theta$  the Weiss constant. The observed linear dependence was found to hold only at low temperatures. At high temperatures the relationship is destroyed, and the law ceases to hold, the changes in magnetic susceptibility becoming irreversible. Heating and cooling lead to different susceptibility values. This irreversible character holds for glasses containing any of the investigated ions, and this suggests that such behavior is due solely to changes in the framework of the glass itself. Orig. art. has: 4 figures, 1 table, and 1 formula.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University)

SUBMITTED: 10Jun63

ENCL: 00

SUB CODE: MT

NO REF SOV: 003

OTHER: 001

Card 2/2

S/137/62/000/005/125/150  
A160/A101

AUTHORS: Prosvirin, V. I., Tarasov, B. Ya.

TITLE: Nitriding with the use of high-frequency current heating

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 5, 1962, 132, abstract 51709  
(V sb. "Prevrashcheniya v splavakh i vzaimodeystviye faz." Riga, AN  
LatvSSR, 1961, 51 - 87)

TEXT: The nitriding with the use of high-frequency current heating was carried out with test pieces from Armco-Fe (0.04% C), 45 X (45Kh) steel, 38XMEOA (38KhMYuA) steel (0.35% C, 1.54% Cr, 0.63% Al, 0.16% Mo) and perlite iron in a special installation. The nitriding was conducted in the flow of  $NH_3$  in two variants. 1) At a constant temperature, or more precisely - under slowly-increasing temperature conditions. The maximum heating temperature was considered to be the nitriding temperature (for Armco-Fe - 775, 790, 815, 910, 1,020°C, for the 38KhMYuA steel - 950-750°C, and for the iron - 850°C). The nitriding time was the period from switching on the installation and the beginning of the heating of the pieces. 2) Within a fixed temperature range (mainly at temperatures of <750°C). After the nitriding, the pieces were cooled in water. Subsequently,

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one part of them was subjected to tempering. A description is given of the experimental method. The nitriding lasted 2 - 30 minutes. There is an optimum consumption of  $\text{NH}_3$  at each temperature of nitriding. A change of the nitriding temperature within  $775 - 1,020^\circ\text{C}$  has its strongest effect on the absorption of N by iron at a consumption of 1.6 - 3.2 l of  $\text{NH}_3$  per minute. The investigations revealed that it is possible to nitride Fe and steels when heating with high-frequency currents (2 - 10 minutes), whereby sharply-defined nitrous phases are obtained in the diffusion layer. The maximum absorption of N by iron is noted when nitriding at  $815 - 910^\circ\text{C}$ , and by the 45Kh steel - at  $860^\circ\text{C}$ . When nitriding for a short time, a visible diffusion layer is obtained for Fe at temperatures of up to  $910^\circ\text{C}$ , and for the 45Kh steel - at temperatures of up to  $860^\circ\text{C}$ . The layer consists of an exterior zone of acicular crystals (phase  $\epsilon$ ), and of an interior zone from nitrous austenite and nitrous martensite. When nitriding Fe at  $1,020^\circ\text{C}$  and the 45Kh steel at  $>900^\circ\text{C}$ , a homogenous diffusion layer was obtained from nitrous martensite and troostite martensite. When nitriding the 38KhMYuA steel for 10 minutes and 45Kh steel for 2 minutes, diffusion layers with a surface Hv 1,100 - 1,200  $\text{kg/mm}^2$  are obtained for 38KhMYuA steel and 1,500  $\text{kg/mm}^2$  for the 45Kh steel. The highest surface-hardness values are obtained

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after the pieces were tempered (nitrided at 600 - 650°C). A short nitriding with quenching secures a high Hv in perlite cast iron. There are 22 references.

A. Babayeva

[Abstracter's note: Complete translation]

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18.7530 1087,1454,1145

S/180/61/000/002/010/012  
E071/E435

**AUTHORS:** Prosvirin, V.I. and Tarasov, B.Ya. (Riga)

**TITLE:** Rapid Nitration of Steels on Heating With High Frequency Currents

**PERIODICAL:** Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Metallurgiya i toplivo, 1961, No.2, pp.132-140

**TEXT:** In view of the automation of technological processes it would be very advantageous to combine surface hardening with high frequency currents with simultaneous nitration. For this reason the authors carried out some investigations which showed that the diffusion saturation of the surface of pure iron during induction heating can be effected in a very short time corresponding to the duration of heating during surface hardening. Usually, with increasing nitration temperature, a sharp increase in the degree of dissociation of ammonia takes place which weakens the diffusion activity of the medium and leads to decarburization of the surface layer. It was, therefore, necessary to supply to the surface of the heated metal non-dissociated ammonia, so that the dissociation took place on the surface of the metal. For this purpose apparatus was designed (Fig.1) in which cold ammonia could be

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supplied to the specimen. The velocity of ammonia in respect of the surface of ammonia could be varied from 0 to 150 m/min (the velocity is referred to undissociated ammonia at 20°C). During the experiments the consumption of ammonia and the temperature of the surface of the specimen were recorded. After reaching the necessary temperature the specimen was cooled in cold water, the surface of which was covered with a thin layer of kerosene. The specimen tested was a hollow armco iron cylinder 55 mm high and 16 mm in diameter. It was placed on to a cylindrical holder of the same height. The distance between the specimen and the silica tube through which ammonia was passed was 1 to 1.5 mm. The amount of absorbed nitrogen was determined by the increase in weight of the specimen tested. The distribution of nitrogen along the depth of the diffusion layer was determined by chemical analysis of dissolved layers. The microhardness of the individual phases of the diffusion layer was determined on a PMT-3 (PMT-3) apparatus at a load of 10 g. The supply of ammonia to the specimen coincided with the switching on of the generator. The whole period of heating the specimen to a given temperature was

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included into the duration of the nitration process. It is pointed out that about 25% of the total duration of heating is used for heating the surface of the specimen to 500 to 550°C. Nitration was done in the temperature range 775 to 1100°C with the duration of heating to a given temperature not exceeding 5 min. The influence of the maximum heating temperature during nitration and of the velocity of ammonia on the absorption of nitrogen was studied using a heating period of 2 min. The influence of the maximum heating temperature (at optimum flow rates of ammonia) is shown in Fig.2. With increasing temperature, the activity of the gaseous medium increases passing through a maximum. Within the temperature range 800 to 900°C, the absorption of nitrogen by the surface remains approximately constant. The position of the maximum is determined by the velocity of ammonia. The influence of the velocity of ammonia on the activity of the medium at a constant temperature is shown in Fig.3a. For a given temperature there is an optimum velocity at which a maximum of the activity is obtained, beyond this velocity the activity of the medium decreases sharply. The influence of the ammonia velocity on its degree of dissociation is shown in Fig.3b. There was a minimum

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degree of dissociation for each temperature which changes little on further increase of the flow rate of ammonia. Structural analysis of the diffusion layers indicated that at all heating temperatures (775 to 910°C) and at various durations of the process, the diffusion layer consisted of two sharply expressed zones, separated from each other and from the base metal by boundaries parallel to the surface of the specimen. The external zone consisted of acicular crystallites corresponding to supercooled  $\beta$ -phase and high nitrogen concentrations. The second zone corresponded to nitrided austenite and nitrided martensite (solid solutions of nitrogen in  $\gamma$  and  $\alpha$  iron). Further in depth, supersaturated nitrided ferrite is located. Photographs of the microstructure of diffusion layers are reproduced in the paper. The microhardness of the diffusion layers was measured on the external and internal boundary of each zone. The results are shown in Fig.5. The hardness of the first and the second zone of each nitration temperature (775 to 910°C) increases in the direction of the diffusion of nitrogen and the hardness of nitrided ferrite decreases. The dependence of the

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thickness of the diffusion layer (1st and 2nd zones) depends on the heating temperature, duration of heating and velocity of ammonia (Fig.6). With increasing velocity the thickness of the layer at first increases, achieves a maximum (within a range of 15 to 20 m/min) and then continuously decreases. With increasing temperature (at a constant heating time of 2 min) the thickness of the zone increases. The duration of heating to the maximum heating temperature has a substantial effect on the thickness of the diffusion layer. For instance, on heating to 800°C in 22 sec the thickness was about 0.015 mm, in 56 sec - 0.023 mm, in 2 min - 0.035 mm and in 5 min - 0.055 mm. Thereby the development of the zone with  $\delta$ -phase is much faster than that of the austenite-martensite zone. Since in all cases rapid cooling was used, the structures of the diffusion layer studied relate to supercooled phases. The external zone of the layer, pertaining to the  $\delta$ -phase, consisted of acicular crystallites inside which were occasional inclusions, more often along the boundaries. The austenite-martensite zone closer to the external surface was more uniform and apparently rich in  $\gamma$ -phase. The internal part of this zone has a sorbitic structure, occasionally with a directional

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orientation, similar to martensite in steels. The third zone of the diffusion layer - supercooled nitrided ferrite - had a large thickness reaching up to 0.5 mm in 2 min of nitration. In the grains of this zone, at the martensite boundary, nitride inclusions were observed; these were often orientated along the slip planes. The microhardness of these grains is by 20 to 25 units above that of ferrite containing nitrogen. Since the appearance of  $\epsilon$ -phase in the surface layer would not always be desirable, the authors established that its appearance can be avoided by increasing the temperature to 1020°C. Although on increasing the temperature from 910 to 1020°C the diffusion activity of the medium decreases by about 25%, yet the amount of absorbed nitrogen is sufficient to cause structural changes in the diffusion layer. The data obtained indicate that the velocity of ammonia at 1020°C has little influence on the absorption of nitrogen by iron. Within a range of velocities 6 to 40 m/min, the specific absorption of nitrogen in 2 min amounts to about  $1.2 \times 10^{-3}$  g/cm<sup>2</sup>. The microstructure of the diffusion layer consists of a martensite zone of needle-like structure (Fig.4). The thickness

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of the martensite zone reaches 1 mm and depends little on the consumption of ammonia. The velocity of the diffusion of nitrogen is so high that the nitrogen concentration corresponding to the appearance of the  $\gamma$ -phase is not reached. On nitration at a higher temperature (1100°C) the necessary concentration of nitrogen in the diffusion layer could not be achieved. An interesting feature in the dispersion hardening was observed on low temperature heating (175°C for 30 min) of nitrided specimens. Microhardness measurements were carried out before and after heating (table). The low temperature heating could cause strengthening or weakening of nitrided phases depending on the time of separation of secondary phases - during the low temperature heating or during cooling on hardening. Such behaviour of the  $\gamma$ -phase and nitrided austenite was actually observed. Nitrided martensite appears to undergo a considerable decomposition during low temperature heating. The following conclusions are arrived at: 1) The possibility was demonstrated of rapid nitriding during high frequency heating for hardening, permitting the formation of high concentrations of nitrogen and a considerable depth of the diffusion layer in a few seconds to

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1 - 2 minutes. 2) The diffusion layers formed contain the following phases: a) nitrided  $\delta$ -phase in the supercooled state, this possesses a high hardness (400 kg/mm<sup>2</sup>) and is capable of weak dispersion hardening, it reacts strongly to changes in the velocity of flow of ammonia and the duration of heating during nitration and depends little on the temperature within the range of 775 to 910°C; b) nitrided supercooled austenite has a low hardness (200 kg/mm<sup>2</sup>) and a higher tendency to dispersion hardening than the  $\delta$ -phase; c) nitrided martensite possesses the highest hardness (600 to 700 kg/mm<sup>2</sup>), the thickness of the layer and the hardness increase with increasing heating temperature up to 910°C; d) nitrided ferrite has a maximum thickness reaching 0.5 mm in 2 minutes of nitriding. 3) To each heating temperature there is a corresponding minimum degree of dissociation of ammonia, determined by the equilibrium between the components of the gaseous mixture. This equilibrium appears at high velocities of the gas, when the completion of the association of atoms of hydrogen and nitrogen into their molecules does not take place. There are 6 figures, 1 table and Card 8/14

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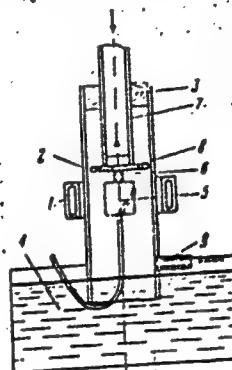
Rapid Nitration of ...

23 Soviet references.

SUBMITTED: June 8, 1960

Fig.1. Diagram of the apparatus for rapid nitriding.

- 1 - induction coil,
- 2 - quartz insulator
- 3 - stopper
- 4 - quenching liquid
- 5 - specimen tested
- 6 - holder for specimen and thermocouple
- 7 - tube for the supply of ammonia to the specimen
- 8 - centering ring with holes
- 9 - outlet tube



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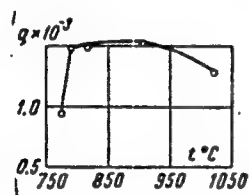
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Fig.2. The amount of nitrogen absorbed by iron on nitration during the heating to various temperatures for hardening in 2 min at optimal rates of the supply of ammonia .

q - increase in the weight, g/cm<sup>2</sup>



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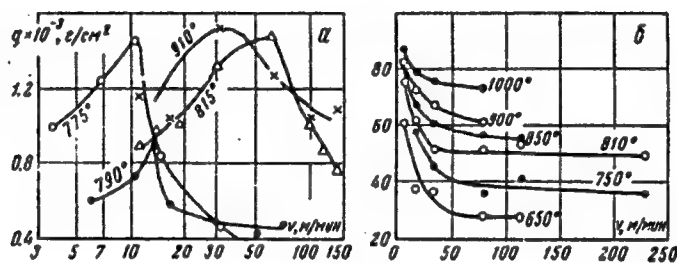
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Fig.3. The influence of the velocity of flow of ammonia  $v$ , m/min on the absorption of nitrogen by iron  $q \times 10^{-3}$  g/cm<sup>2</sup> during nitration in 2 min (Fig.3a) and on the degree of dissociation of ammonia (Fig.3b).



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Fig.5. Microhardness  $H_{\mu}$  along the depth of the diffusion layer of nitrided iron

Fig.5a: after 2 min of heating to various temperatures for hardening

Curve 1 - external part of the  $\epsilon$ -phase zone

Curve 2 - internal part of the  $\epsilon$ -phase zone

Curve 3 - nitrided austenite

Curve 4 - nitrided martensite

Fig.5b - at 1020°C for 2 min

Curve 1 - at a gas velocity of 32 m/min

Curve 2 - at a gas velocity of 10 m/min

Curve 3 - at a gas velocity of 20 m/min.

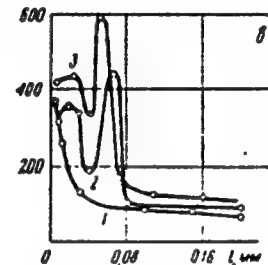
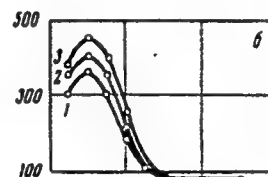
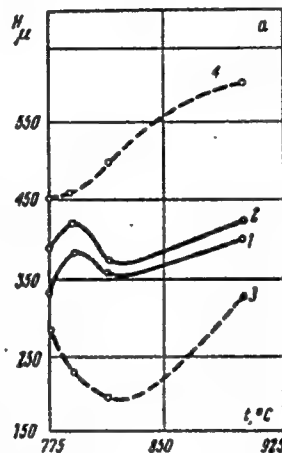
Fig.5B - at 80°C for 22 sec

Curve 1 - at 815°C for 2 min

Curve 2 - at 910°C for 2 min

Curve 3 -  $l$  - distance from

Card 12/14 the surface of the specimen, mm



20270

S/180/61/000/002/010/012

E071/E435

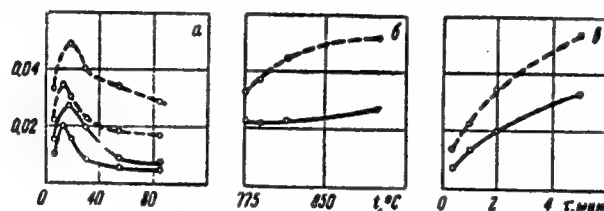
Rapid Nitration of ...

**Fig.6.** Dependence of the thickness of the  $\delta$ -phase zone (continuous lines)

Fig.6a - dependence on the velocity of ammonia (at 815 and 910°C)

Fig.6b - dependence on the temperature of nitriding (2 min at a velocity of ammonia of 30 m/min)

Fig.6B - dependence on the duration of nitriding process (at 800°C). The corresponding changes in the summary thickness of the first and second zones are plotted in broken lines.



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S/180/61/000/002/010/012  
E071/E435

Table.

- 1 - Conditions of treatment
- 2 - Microhardness,  $\text{kg/mm}^2$ , of the diffusion layer at various depths from the surface, mm
- 3 - zone of the  $\delta$ -phase
- 4 - austenite-martensite zone
- 5 - nitrided ferrite zone

Режим обработки	Микротвердость, $\text{кг/мм}^2$ , диффузионного слоя на различной глубине от поверхности, мм					
	зона $\delta$ -фазы		аустенитно-мартенситная зона		зона азотистого феррита	
	0.01	0.02	0.025—0.03	0.045—0.060	0.07	0.26
Азотирование при 815°	369	376	206	503	118	101
То же + отпуск 175°	402	401	246	374	95	90
Азотирование при 910°	427	444	328	505	160	123
То же + отпуск 175°	343	339	265	271	95	91

Card 14/14

PROSVIRIN, V.I., doktor tekhn.nauk, red.; VINOGRADSKAYA, Ye.L.,  
kand. tekhn. nauk, red.; TARASOV, B.Ya., red.;  
TEYTEL'BAUM, A., red.

[Transformations in alloys and the interaction of phases]  
Prevrashchenia v splavakh i vzaimodeistvie faz. Riga, Izd-  
vo AN Latv.SSR. Vol.2. 1963. 94 p. (MIRA 17:4)

1. Latvijas Padomju Socialistiskas Republikas Zinatnu Akademijs.  
Automatikas un mehanikas instituts.

L 39998-65 EWT(m)/EWP(w)/ENA(d)/T/EWP(t)/EWP(z)/EWP(s) MJW/JD/QS

ACCESSION NR: AT4049811

S/0000/64/000/000/0039/0046

AUTHOR: Prosvirin, V. I.; Tarasov, B. Ya.

TITLE: Rapid nitriding by heating with high frequency currents

SOURCE: Soveshchaniya po uprochneniyu detaley mashin, 1962. Protsessy uprochnen-  
iya detaley mashin (Processes of the hardening of machine parts); doklady sovesh-  
chaniya. Moscow, Izd-vo Nauka, 1964, 39-46

TOPIC TAGS: steel nitriding, cast iron nitriding, rapid nitriding, high frequency  
nitriding, surface hardness, fatigue strength

ABSTRACT: The main disadvantage of nitriding as a method of hardening by thermal  
diffusion is the duration of the process, which requires scores of hours. Inves-  
tigations have shown that high-temperature nitriding with high-frequency currents  
combined with hardening leads to strengthening of the surface layer. In this  
technique, gaseous ammonia is delivered to the surface at different velocities.  
In the authors' studies, the sample was placed either in an air-tight tube and  
heated with a high-frequency induction coil, or directly in an open induction coil.  
For both methods, the sample was hardened in water after heating, the nitriding

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ACCESSION NR: AT4049811

temperature was measured by a thermocouple, the duration was taken from the time the unit was switched on, and the microhardness was measured by the FMT-3 device under a load of 3 grams. One of the main factors determining the results of nitriding is the degree of dissociation of the ammonia, which depends on its temperature and velocity. At low velocity, the quantity of associated atoms will be the highest. The main experiments reported here were made with technically pure iron. The nitriding temperature was varied from 775 to 1000C and the duration was 2 minutes. At 775-910C, the curves relating increase in weight and ammonia velocity showed a clear maximum, while at 1020C absorption of nitrogen did not depend on the ammonia velocity. During short-term nitriding at up to 800C, the quantity of absorbed nitrogen increased sharply, while between 800C and 900C it did not change and remained at a maximum. A further rise in temperature to 1020C led to a decrease in the quantity of absorbed nitrogen. Steel 45Kh showed the same results as cast iron, and the tests showed similar results for both of the described nitriding methods. Rapid cooling from temperatures above 591C led to the formation of metastable phases, while increasing the nitriding temperature to 1020C led to a sharp variation in the structure of the diffusion layer. The nitride layer had a higher hardness at the surface, decreasing with depth. High

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ACCESSION NR: AT4049811

3

surface hardness could also be obtained by short-term nitriding of common perlitic and high-strength magnesium cast iron. The best results in nitriding of cast iron are obtained at 850C when a surface hardness of 900kg/mm<sup>2</sup> is obtained, while nitriding of high-strength cast iron at 900C results in a hardness of 600 kg/mm<sup>2</sup>. During nitriding, different layer thicknesses are obtained; for two minutes; with iron - 0.04-0.09 mm, 45Kh steel - 0.03-0.05 mm, cast iron - up to 0.10 mm; for ten minutes: with 38KhMYuA steel up to 0.08-0.10 mm. This was verified by metallographic analysis. The total diffusion depth, however, exceeds these values. When even a few hundredths of a percent of alpha phase nitrogen is present, the strength and wear resistance are increased. Thus, when 0.01% nitrogen is present in ferrite, the fatigue strength is increased more than 1.5 times. Orig. art. has: 7 figures.

ASSOCIATION: None

SUBMITTED: 21May64

ENCL: 00

SUB CODE: MM

NO REF SOV: 001

OTHER: 001

Card 3/3 *pr*

L4775-65 EWT(m)/EFF(c)/EWP(j)/T Pc-4/Pr-4 RM

26  
25  
B

ACCESSION NR: AP5012423

UR/0374/65/000/002/0009/0014

AUTHOR: Vinogradskaya, Ye. L. (Riga); Molchanova, G. A. (Riga); Tarasov, B. Ya. (Riga)

TITLE: Effect of processing technology on the nature of the supramolecular structure in crystalline polymers

SOURCE: Mekhanika polymerov, no. 2, 1965, 9-14

TOPIC TAGS: crystalline polymer, high-pressure polyethylene, polycaprolactam, polymer processing, supramolecular structure, polymer microhardness, polymer density

ABSTRACT: A study has been made of the effect of the processing technology on the nature of morphological forms (supramolecular structures) and physical and mechanical properties of crystalline polymers, and of the relationship between the supramolecular structure and properties of these polymers. It is stressed that determination of this relationship will contribute to the proper design and effective use of polymeric materials. Experiments were conducted with high-pressure polyethylene and polycaprolactam (Poliamid 6) specimens prepared by compression molding under various conditions. The effect of molding temperature, molding pressure, cooling rate, and aging on supramolecular structure, microhardness, and density was determined. From the results of the study, which are given in graphic form, it was

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L 47748-65

ACCESSION NR: AP5012423

concluded that processing technology considerably affects the nature of the supramolecular structure of polymeric materials. This structure depends on the chemical composition of the material and on crystallization conditions. The properties of polymeric materials are determined by the nature of the supramolecular structure components. The principal forms of supramolecular structure in polyethylene and polylactam are spherulites of different textures and sizes. The strength of spherulites increases with the degree of their ordering. Fine spherulites are harder than coarse spherulites. Supramolecular structures undergo changes in the course of aging of the material owing to relaxation of internal stresses and additional crystallization. Prolonged aging increases the hardness and density of the material. The authors express their gratitude to Academician V. A. Kargin for advice given in the course of this study. Orig. art. has: 8 figures. [B0]

ASSOCIATION: none

SUBMITTED: 16Dec64

NO REF SQV: 009

ENCL: 00

OTHER: 004

SUB CODE: CC, MT

ATD PRESS: 4004

TP  
Card 2/2

BEREGOVSKIY, V.I.; BREGMAN, R.V.; DANILOVA, L.A.; KOZYREV, V.S.;  
TARASOV, B.Ye.; TEPER, V.S.; FOMINYKH, Ye.G.; LIBERMAN,  
S.S., red.; KOROVINA, N.A., tekhn. red.

[Complete use of pyritic cinders] Kompleksnoe ispol'zova-  
nie piritnykh ogarkov. Moskva, Metallurgizdat, 1963. 71 p.  
(MIRA 17:3)

TARASOV, D.

Errors in the design of a factory. Stroi.mat., izd.1 konstr.  
2 no.9:16-17 S '56. (MLRA 9:11)

1. Glavnyy inzhener zavoda no.12 Glavmoszhelezobetona.  
(Ochakovo--Reinforced concrete)

STARSHINOV, B.N., kand.tekhn.nauk; LEBEDEV, A.Ye., kand.tekhn.nauk;  
LUKASHOV, G.G., inzh.; SAVELOV, N.I., inzh.; TARASOV, D.A., inzh.;  
SUPRUN, I.Ye., inzh.; TIKHOMIROV, Ye.N., inzh.; SINITSKIY, V.D.,  
inzh.; GORBANEV, Ya.S., inzh.; PRIKHODKO, L.D., inzh.

Operation of a blast furnace with a capacity of 1513 m<sup>3</sup>. Biul.  
TSIICHM no.9:1-6 '60. (MIRA 15:4)  
(Blast furnaces)

STARSHINOV, B.N., kand.tekhn.nauk, SAELOV, N.I., inzh., ~~TARASOV, D.A.~~,  
inzh., SUPRON, I.Ye., inzh., GORBANEV, Ya.S., inzh., PLISKANOVSKIY,  
S.T., inzh.

Adopting a blast furnace with a useful capacity of 1719 m<sup>3</sup>.  
Metallurg 5 no.7:7-9 J1 '60. (MIRA13:7)  
(Blast furnaces)



VOLOSHIN, A.I.; BOGOYAVLENSKIY, K.A.; AKHTYRCHENKO, A.M.; TURIK, I.A.;  
 ZHIDKO, A.S.; LYALYUK, V.S.; GABAY, L.I.; ONOPRIYENKO, V.P.;  
 STARSHINOV, B.N.; BABIY, A.A.; SAVELOV, N.I.; Prinimali  
 uchastiye: TORYANIK, E.I.; VASIL'YEV, Yu.S.; SHEMAI', T.I.;  
 SENYUTA, V.I.; BONDARENKO, I.P.; AMSTISLAVSKIY, D.M.;  
 ANDRIANOV, Ye.G.; SERGEYEV, G.N.; ZAMAKHOVSKIY, M.A.;  
 LYUKIMSON, M.O.; IVONIN, V.K.; TSIMBAL, G.I.; SEN'KO, G.Ye.;  
 KONAREVA, N.V.; SOLODKIY, Yu.L.; LUKASHOV, G.G.; TARASOV, D.A.;  
 GORBANEV, Ya.S.; SUPRUN, I.Ye.; TIKHOMIROV, Ye.I.; KONONENKO, P.A.;  
 PROKOPOV, V.N.; GULYGA, D.V.; PLISKANOVSKIY, S.T.; PONOMAREVA, K.Ye.

Effect of the length of coking on coke quality and the performance  
 of blast furnaces. Koks i khim. no.12:26-32 '61.

(MIRA 15:2)

1. Ukrainskiy uglekhimicheskiy institut (for Voloshin,  
 Bogoyavlenskiy, Akhtyrchenko, Turik, Zhidko, Lyalyuk, Toryanik,  
 Vasil'yev, Shemai'). 2. Zhdanovskiy koksokhimicheskiy zavod  
 (for Gabay, Senyuta, Bondarenko, Amstislavskiy, Andrianov,  
 Sergeyev, Zamakhovskiy, Lyukimson, Ivonin, Tsimbal). 3. Ural'skiy  
 nauchno-issledovatel'skiy institut chernykh metallov (for  
 Onopriyenko, Starshinov, Babi, Sen'ko, Konareva, Solodkiy).  
 4. Zavod "Azovstal'" (for Savelov, Lukashov, Tarasov, Gorbanev,  
 Suprun, Tikhomirov, Kononenko, Prokopov, Gulyga, Pliskanovskiy,  
 Ponomareva).

(Coke)

(Blast furnaces)

PLYUSHCH, Boris Maksimovich; ROYTMAN, Mariya Vladimirovna;  
SARKISYAN, Vachagan Ovanesovich; ESIBYAN, Migran  
Aleksandrovich; Prinimali uchastiye: KLIMOVA, N.V.;  
EL'BIRT, M.D.; PARFENOV, A.N., dots., retsenzent;  
TARASOV, D.A., prof., retsenzent; AGADZHANOV, S.P.,  
~~inzh., retsenzent~~

[Electrical equipment for oil and gas fields] Elektro-  
oborudovanie nef'tianykh i gazovykh promyslov. Moskva,  
Nedra, 1965. 311 p. (MIRA 18:4)

1. Zaveduyushchiy kafedroy obshchey i spetsial'noy elektro-  
tekhniki Groznenskogo nef'tyanogo instituta (for Parfenov).
2. Vsesoyuznyy zaachnyy politekhnicheskiy institut (for  
Tarasov). 3. Neftyanoye upravleniye Soveta narodnogo kho-  
zyaystva SSSR (for Agadzhanov).



STARSHINOV, B.N.; OSTROUKHOV, M.Ya.; KOCHINEV, Ye.V.; Primali uchastiye:  
TARASOV, D.A.; SOROKA, P.F.; KARACHENTSEV, M.D.; OS'KIN, V.T.;  
KORNEV, V.K.; POPOV, Yu.A.; DOLMATOV, V.A.; AYUKOV, A.S.

Blowing-in of large blast furnaces. Sbor.trud. UNIIM  
no.11:27-32 '65. (MIRA 18:11)

TARASOV, D. A.

Aug 1947

USSR/Engineering  
Poles  
Power Transmission, Electric

"Ferrocconcrete Poles for Electric and Communications  
Wires of Petroleum Industries," D. A. Tarasov,  
Energy Division, Ministry of the South-Western  
Petroleum Industry, 5 pp

"Energeticheskiy Byulleten'" No 8

This method of construction produces durable poles  
and results in economy of critical materials. They  
have found wide use in many countries (among them  
the US, and Western Europe) and can support lines  
which carry up to 220 kv. The use of centrifuged  
cement is recommended. Much research was conducted

22758

Aug 1947

USSR/Engineering (Contd)  
Poles  
Power Transmission, Electric

at the Central Laboratory of the Tiflis Research and  
Investigation Institute for Construction and Hydro-  
energy. Shows some of these poles in use, and one  
illustration of the equipment used for manufactur-  
ing these poles.

22758

*TARASOV, D.A.*

TARASOV, D.A., redaktor.

[Electric drive in deep well pumping; materials from a meeting of the energetics section of the Technical Council] Elektroprivod v glubokonasosnoi dobyche nefi; materialy soveshchaniia energeticheskoi sektsii Tekhnicheskogo soveta. Moskva, Gostoptekhsdat, 1949. 55 p.

(MIRA 8:4)

1. Moscow; Tsentral'nyy nauchno-issledovatel'skiy institut mekhanizatsii i organizatsii truda v neftyanoy promyshlennosti. Byuro tekhniko-ekonomicheskoy informatsii.

(Oil well pumps) (Electric driving)

TARASOV, D.A.

GUREVICH, B.M., redaktor; KUZNETSOV, G.S., redaktor; TARASOV, D.A., redaktor; YEREMOV, P.R., redaktor; POLOSINA, A.S., tekhnicheskii redaktor.

[Power supply and operation of power equipment in the petroleum industry] *Energosnabzhenie i ekspluatatsiya energoustanovok neftyanoi promyshlennosti*. Moskva, Gos. nauchno-tekhn. izd-vo neftyanoi i gornotoplivnoi lit-ry, 1952. 234 p. [Microfilm] (MLRA 7:11)

1. Russia (1923- U.S.S.R.) Ministerstvo neftyanoy promyshlennosti. (Electric power) (Steam engineering) (Petroleum industry)

TARASOV, D.A.

Increasing the capacity of electric power in enterprises of the Ministry  
of Petroleum Industry. Energ.biul. no.8:1-7 Ag '53. (MLRA 6:8)  
(Petroleum industry) (Electric power)

TARASOV, D.A.

The role of electric power in developing the Soviet petroleum  
industry. Energ.bkul. no.11:1-7 N '57. (MIRA 10:10)  
(Electric power) (Petroleum industry)

TARASOV, D. A., AND TATARINOV,

"Efficiency of Fuel Utilization in USSR Oil Refineries.

report presented at the 14th Sectional Meeting of the World Power Conference,  
Montreal, Canada, 7-12 Sep 1958.

AUTHORS: Tarasov, D.A., Taterinov, I.I.

TITLE: The Effectiveness of Fuel Utilization in the Oil Refining Industry (Effektivnost' ispol'zovaniya topliva v neftepererabatyvayushchey promyshlennosti)

PERIODICAL: Energeticheskiy byulleten', 1958, Nr 12, pp 1-16 (USSR)

ABSTRACT: This is a study on direct and indirect fuel consumption in oil refining plants. Described are: the consumption and the varieties of fuels; general fuel distribution in basic sections; the effectiveness criterion of fuel utilization; the specific fuel consumption in basic oil processing; sources of power supply; specific fuel consumption for steam and electric power generation. The use of steam driven pumps, the deficient utilization of the worked-out steam and use of electric pumps are mentioned and compared. A scheme of steam supply for oil refining plants with full utilization of exhaust steam is given. The varieties of heat transmitters and the effectiveness of their usage in the form of steam or hot water, as well as means of collecting the steam condensate and its conducting to the thermal power plant are studied. A study on heat utilization of exhaust gases of oil processing furnaces, hot oil products and their gases is also presented.

Card 1/2



SOY/90-58-12-1/1

The Effectiveness of Fuel Utilization in the Oil Refining Industry

An air heating device, elaborated by the GiproNeftemash Institute is described and illustrated. Recommended are: disconnection of the fire extinguishing steam pipe system to reduce steam losses and the use of preheated compressed air for pulverization of the fuel instead of steam. Means of increasing the efficiency coefficient of the tubular furnaces are described. A diagram of a new type furnace, which was developed by the GiproNeftemash Institute is given. The feature of the new furnace is: the furnace is provided with panel burners, irradiating walls and a two-sided irradiation screen. The construction of this furnace is economical, requires less space and construction materials. It is 4-6 times smaller than the existing furnace of the same capacity. In conclusion, the rationalization of the fuel supply in oil refining industry and burning at the site of highly viscous fuels, obtained during the oil processing and in other plants and TETs, is described. There are 4 diagrams, 3 tables, 2 histograms, 2 block diagrams, 2 graphs and 1 photo.

Card 2/2

ZAMANSKIY, Mikhail Abramovich, dotsent; KULIZADE, Kozim Novruzovich, dotsent; MOVSESOV, Nerses Savadovich, inzh.; TARASOV, Dmitriy Aleksandrovich, dotsent; SHISHKIN, Oleg Petrovich, kand.tekhn. nauk; PARFENOV, A.I., dotsent, retsenzent; SVIATITSKAYA, K.P., vedushchiy red.; SHAKHMAIEVA, Ye.A., vedushchiy red.; MUKHINA, E.A., tekhn.red.

[Electric power supply and electric equipment of oil fields]  
Elektrosnabzhenie i elektrooborudovanie neftiannykh promyslov.  
Moskva, Gos.nauchno-tekhn.izd-vo nef. i gorno-toplivnoi lit-ry,  
1959. 476 p. (MIRA 13:2)

1. Zaveduyushchiy kafedroy elektrosnabzheniya i elektrooborudovaniya Groznenskogo neftyanogo instituta (for Parfenov).  
(Electric lines) (Oil fields--Equipment and supplies)

TARASOV, D.A., inzh.; TATARIMOV, I.I., inzh.

Rational utilization of fuel and heat energy in petroleum refineries.  
Prom. energ. 14 no.1:3-9 Ja '59. (MIRA 12:1)  
(Petroleum refineries) (Heat engineering)

TARASOV, Dmitriy Aleksandrovich, dots.; VRONSKIY, L.N., ved. red.;  
POLOSINA, A.S., tekhn. red.

[Practical manual for oil-field electricians] Prakticheskoe  
rukovodstvo dlia elektrikov neftiannykh promyslov. Moskva, Gos-  
toptekhzdat, 1962. 438 p. (MIRA 15:7)  
(Oil fields--Electric equipment)

RASPOPOV, I.V.; LUKASHOV, G.G.; PLISKANOVSKIY, S.T.; ARTYUKHOV, B.N.;  
TARASOV, D.A.; ARIKHBAEV, V.V.; Primali uchastiye: ZENYUKOV,  
V.P.; NEMTSOV, N.S.; GODLEVSKIY, A.I.; LEVCHENKO, G.F.;  
DEGTYAREVA, Z.I.; GORLACH, A.A.; YAKUSHECHKIN, Ye.I.

Intensifying the sintering process by air preheating and by  
improving the performance of exhaust fans. Stal' 23 no.8:  
679-682 Ag '63. (MIRA 16:9)

1. Zhdanovskiy metallurgicheskiy institut i metallurgicheskiy  
zavod "Azovstal'."

(Sintering)

ZAMANSKIY, Mikhail Abramovich, dots.; SUD, Isaak Izrailevich,  
kand. tekhn. nauk; SULKHANISHVILI, Ivan Nikolayevich,  
kand. tekhn. nauk; TARASOV, Dmitriy Aleksandrovich, dots.;  
SHKOL'NIKOV, Bernard Markovich, kand. tekhn. nauk;  
SHTURMAN, Leonid Isayevich, kand. tekhn. nauk; STOTSKIY,  
L.R., kand. tekhn. nauk, dots., red.;

[Electric equipment for oil and gas fields] Elektrooboru-  
dovanie nef'tianyykh i gazovykh promyslov. Moskva, Izd-vo  
"Nedra," 1964. 303 p. (MIRA 17:7)

STESHENKO, Nikolay Nikitich; TARASOV, D.A., red.; ISAYEVA, V.V.,  
ved. red.; VORONOVA, V.V., tekhn. red.

[Manual on the installation and repair of electrical  
systems on premises subject to explosion hazards in the  
petroleum and gas industry] Spravochnik po montazhu i  
remontu elektroustanovok vo vzryvoopasnykh sooruzheniyakh  
neftianoj i gazovoj promyshlennosti. Moskva, Izd-vo  
"Nedra," 1964. 419 p. (MIRA 17:3)

ARKHANGEL'SKIY, P.Ye., inzhener; ARKHIPOV, P.P., inzhener; VAS'KOV, M.P.,  
agronom; ZHMUDSKIY, D.A., arkhitekt; IVANOV, A.P., arkhitekt; KIBI-  
REV, S.F., arkhitekt; KRYLOV, N.V., inzhener-arkhitekt; KULAKOV,  
D.V., arkhitekt; MARTYNOV, P.F., inzhener; NIKIFOROV, V.S., inzhener;  
NOSKOV, B.G., arkhitekt; PETUKHOV, B.V., kandidat tekhnicheskikh nauk;  
RUDANOV, M.L., kandidat tekhnicheskikh nauk; RYAZANOV, V.S., kandidat  
arkhitektury; SOKHRANICHEV, N.S., inzhener-arkhitekt; TARASOV, D.I.,  
arkhitekt; SHMIDT, N.E., kandidat arkhitektury; KHOMUTOV, Ye.Ye.,  
arkhitekt; VOL'FOVSKAYA, V.N., redaktor; FEDOTOVA, A. F., tekhnich-  
skiy redaktor.

[Handbook on the construction of farm buildings] Spravochnik po sel'sko-  
khoz.iastvennomu stroitel'stvu. Avtorskii kollektiv: P.E.Arkhangelskii  
i dr., avtor-sost. N.V.Krylov. Moskva, Gos.izd-vo sel'khoz.lit-ry. Vol.3  
1955. 843 p. (Farm buildings) (MIRA 9:6)



**TARASOV, D.I.**

Acute otitis media in newborn infants. Vest.oto-rin. 18 no.4:  
55-59 J1-Ag '56. (MLBA 9:9)

1. Iz kliniki bolezney ucha, gorla i nosa (dir. - deystvitel'nyy  
chlen AMN SSSR prof. B.S.Preobrazhenskiy) i kliniki akusherstva  
i ginekologii (dir. - prof. I.F.Zhordania) lechebnogo fakul'teta  
II Moskovskogo meditsinskogo instituta.

(OTITIS MEDIA, in infant and child,  
newborn (Rus))

(INFANT, NEWBORN, diseases,  
otitis media (Rus))

TARASOV, D.I., Cand Med Sci—(diss) "Condition of the ear and upper  
respiratory tracts ~~of~~ <sup>in</sup> newborn ~~babies~~ <sup>children</sup> in norm and in pathology." Mos,  
1958. 15 pp (Second Mos State Med Inst im N.I. Pirogov), 220 copies  
(KL,30-58,133)

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TARASOV, D. I.

EXCERPTA MEDICA Sec 7 Vol.12/9 Pediatrics Sep 58

2351. THE CAUSES OF ORIGIN AND PROPHYLAXIS OF ACUTE RHINITIS IN THE NEWBORN (Russian text) - Tarasov D. I. - AKUSH. I GINEK. 1958, (1) (50-53) 34

Studies performed on 1956 newborn infants, affected with acute rhinitis, give grounds for assuming that the pathological course of labour weakens the resistance of the organism of infants and hence promotes the onset of rhinitis. Occasionally, infants get infected through their mothers or personnel, as well as from mothers affected with mastitis and cracked nipples. The haemolytic staphylococcus plays an important part. In order to prevent rhinitis, 3 drops of a 10% solution of albucid was administered twice a day into each nostril of 510 newborns. The morbidity rate decreased by 12 times. (X, 7)

TARASOV, D.I.

Use of dimedrol for local anesthesia in certain operations in rhinology. Vest.otorin. 21 no.3:72-74 My-Je '59.

(MIRA 12:9)

1. Iz kliniki bolezney ukha, gorla i nosa (dir. - deystvitel'-nyy chlen AMN SSSR prof.B.S.Preobrazhenskiy) lechebnogo fakul'teta II Moskovskogo meditsinskogo instituta.

(DIPHENHYDRAMINE, ther. use

local anesth. in nasal cavity.surg. (Rus))

(NASAL CAVITY, surg.

local anesth. with diphenhydramine (Rus))

TARASOV, D.I., kand.med.nauk

Method for removing cysts of the epiglottis. Zhur. ush., nos. 1  
gonl' bol. 20 no.5:39-42 9-0 '60. (MIRA 14:6)

1. Iz kliniki bolezney ukha, gorla i nosa (Zav. - deystvitel'nyy  
chlen AMN SSSR prof. B.S.Preobrazhenskiy) lechebnogo fakul'teta  
II Moskovskogo meditsinskogo instituta imeni N.I.Pirogova.  
(EPIGLOTTIS—DISEASES) (CYSTS)

TARASOV, D.I.

Use of Research Institute for Experimental Surgical Apparatus and  
Instruments instruments and apparatus in otorhinolaryngological  
operations. Trudy NII EKHA I no.5:296-299 '61. (MIRA 15:8)

1. Iz kliniki bolezney ukha, nosa i gorla lechebnogo fakul'teta  
2-go Moskovskogo gosudarstvennogo meditsinskogo instituta im. N.I.  
Pirogova.  
(OTORHINOLARYNGOLOGY) (SURGICAL INSTRUMENTS AND APPARATUS)

TARASOV, D.I., candidat in stiinte medicale

Use of roentgen therapy in prevention of recurrences of nasal polyps in the preoperative and postoperative periods. Otorinolaringologie (Bucur.) 9 no.4:311-314 O-D '64

1. Lucrare efectuata in Clinica de otorinolaringologie (director membru activ al Academiei de stiinte medicale a U.R. S.S., prof. B.S.Freobrajenski [B.S.Freobrazhenskiy]) de la Facultatea terapeutica a Institutului de medicina din Moscova "N.I.Pirogov".

KCMAR, A. P.; TARASOV, D. M.

Crystallographic Orientation of a  $\alpha$ -Phase in Relation to the  $\beta$ -Phase in Alloys of  
the FeNi System

ZhTF 10, 1745, 1940



KOMAR, A. P.; TARASOV, D. M.

Structural Changes in Alloys of the HIAL System and Coercion Force

ZhTF 10, 1745, 1940

TARASOV, D. M.

Structural Changes in Alloys of the Iron-Nickel-Aluminum System and  
The Coercive Force.

Ural Industrial Institute imeni Kirov, Sverdlovsk, 1944.

So: U-1837, 14 April 52.

82900

S/120/60/000/02/031/052  
E032/E414

24,6300

AUTHORS: Tarasov, D.M., Lukashev, A.A., Seleznev, N.A. and  
SKlitzkova, L.F.

TITLE: Some Successes in Development of Sources of Short  
X-Ray Flashes 2/

PERIODICAL: Pribery i tekhnika eksperimenta, 1960, Nr 2,  
pp 118-121 (USSR)

ABSTRACT: A description is given of a new, small generator of voltage pulses having an increased capacitance capable of producing up to 1.6 MV. The generator can be used in conjunction with sharp-focus X-ray tubes. It represents a modification of the GIN-500 generator. The modification consists in increasing the values of the capacitors used in the GIN-500. The new generator is designated as 6GIN-500. It was tried with both demountable and sealed-off sharp-focus X-ray tubes, its total capacitance on discharge being 3000  $\mu\text{F}$  at 1.6 MV. X-ray flashes 0.2  $\mu$  sec in duration can be produced using this generator in conjunction with standard Soviet demountable sharp-focus X-ray tubes.

Card 1/2

Tests showed that a considerable gain in the intensity

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E032/E414

Some Successes in Development of Sources of Short X-Ray Flashes

of the X-rays can be obtained by increasing the capacitance of the generator. The intensity of the radiation was found to be very dependent on the dimensions of the tube and its electrode system. Experiments showed unambiguously that increased cathode diameters and anode-to-cathode distances lead to a considerable increase in X-ray flash intensity. Acknowledgment is made to V.A.Tsukerman for reading the manuscript and valuable suggestions. There are 5 figures, 1 table and 4 Soviet references. *vt*

SUBMITTED: March 6, 1959

Card 2/2

24.7500

AUTHORS:

TITLE:

PERIODICAL: Fizika metallov i metallovedeniye, v.13, no.5, 1962, 738-743

TEXT: The authors described their work, carried out in the mid-1940's, on the explosive deformation and fracture of metals. Under such conditions twinning and dynamic work hardening became intense. The macro- and micro-structures produced in plates mainly of low-carbon steel was examined after deformation produced by cylindrical charges (diameter  $1/2$  to  $2/5$  of the plate thickness) placed vertically on the plate surface. In some experiments the specimens were preheated. The explosion produced inside the metal, close to the deformation crater, a hemispherical zone of intense twinning, whose sharp boundary points to the existence of a critical pressure for twinning; above this pressure it proceeds in various directions and embraces the whole crystalline structure.

ED FOR RELEASE: 07/13/2001

S/126/62/013/005/015/031  
E111/E435

Al'tshuler, L.V., Tarasov, D.M., Speranskaya, M.P.  
Deformation of steel under the action of explosion  
shock-waves

TARASOV, D. V.

ZHIGLEVICH, B.P.; CHAUS, V.M.; SHMANEV, M.N.; ~~TARASOV, D.V.~~

Potato storage following machine harvest. Sel'khozmaschina no.4:  
21-22 Ap '57. (MIRA 10:4)

1. Institut kartofel'nogo khozyaystva (for Zhiglevich). 2. Vsesoyuznyy nauchno-issledovatel'skiy institut sel'skokhozyaystvennogo mashinostroyeniya (for Chaus, Tarasov). 3. Timiryazevskaya sel'skokhozyaystvennaya akademiya (for Shmanev).  
(Potatoes--Storage)

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 10,  
p 151 (USSR) 15-57-10-14302

AUTHORS: Tarasov, E. P., Pleshanov, S. S.

TITLE: The Eastern Sayan Rare-Metal Pegmatites (Vostochno-Sayanskiye redkometal'nyye pegmatity)

PERIODICAL: V sb.: Materialy soveshchaniya geol. Vost. Sibiri i Dal'n. Vostoka po metodike geol.-s'yemoch. i poisk. rabot. Chita, 1956, pp 343-346

ABSTRACT: Rare-metal mineralization (Li, Be, Sn, Nb) is found in pegmatite bodies in the bordering parts of the graben of the Eastern Sayan province, confined to proterozoic rocks and associated with Caledonian granitoid masses. The band of pegmatite bodies extends in a northwesterly direction for 460 km. The fact that the bodies do not transect each other indicates that they formed at the same time throughout the entire field. They have a zonal structure and represent all four textural-paragenetic types in the classification of K. A. Vlasov.

Card 1/2

15-57-10-14302

The Eastern Sayan Rare-Metal Pegmatites (Cont.)

Columbite formed accumulations in association with the process of albitization; cassiterite formed in combination with greisenization. The greatest concentrations of spodumene are found in the pegmatites where the two processes mentioned were weak. For conducting geological surveys at a scale of 1:50,000 and 1:200,000 the stream-detritus method is recommended, with concentrated samples and samples for metal testing obtained from the deluvial-proluvial (slope-wash and fan) deposits along the foot of the slope, with sampling of all rocks for metal-testing purposes, with deep drilling of the alluvial deposits, and with a number of other techniques. During study of the concentrates, one should turn his attention even to the rare discoveries of beryl and columbite. Methods of sampling are described.

V. N. Dubrovskiy

Card 2/2



TARASOV, F.

42409: TARASOV, F. Ispol'zovaniye vtorichnogopara v vakuumapparatakh. moloch prom-st'  
1948, No. 11, s 52-56.

SO: Letopis' Zhurnal'nykh Statey, Vol. 47, 1948.

~~PARASOV, F.~~

Lighting in Esso. IUn.tekh. 3 no.10:53-56 0 '58. (MIRA 11:11)  
(Esso (Kamchatka)--Hydroelectric power stations)

CHEBOTAREV, Yuriy Pavlovich; TARASOV, F.G., red.

[Two-way telephone amplifiers (without differential systems); lecture for 6th year students of telecommunication in the field of "Automatic control, remote control, and communication"] Telefonnye dupleksnye usiliteli (bez differentsial'nykh sistem); lektsiia dlia studentov VI kursa spetsial'nosti "Avtomatika, telemekhanika i sviaz'." Moskva, Vses. zaochnyi in-t inzhenerov zhel-dor. transp., 1964. 20 p. (MIRA 18:4)

TARASOV, F. I.

PA 51/49T100

USSR/Radio  
Vacuum Tubes  
Publications

Jul 49

"New Books" 1 p

"Radio" No 6

Includes the pamphlets: F. I. Tarasov's "A One-Tube Battery Receiver," V. K. Adamskiy and A. V. Kershakov's "Amateur Receiving Antenna," and K. I. Drozdov's "Soviet Radio Tube Production."

51/49T100

TKRASHV, V. I.

How to construct rectifiers Moskva, Gos. energ. izd-vo, 1949. 14 p. (Leningradskaya  
radiobiblioteka, vyp. 13) (51-15314)

TK995.T3

TARASOV, F. I. and GINZBURG, Z. B.

A Beginners' Book for the Radio Amateur (Kniga nachinayushchego radioljubitelya),  
Gosenergoizdat, 1949, 114 pp.

Телескоп, Р. Т.

Detector (radio) receivers and amplifiers. Moscow, Gos. energ. izd-vo, 1961.  
71 p. (Leningradskaya radiobiblioteka, vyp. 66) (51-22375)

TK9956.T29

TARASOV, F. I. and GINSBURG, Z. B.

Homemade Parts for Rural Radio Receivers (Samodel'nyye detali dlya sel-skogo radiopriyemnika), Izd Moskovskiy rabochiy, 1950, 72 pp.



TARASOV, F. I.

"Crystal Receivers and Amplifiers", Popular Radio Library, No. 66, Editor-in-chief, Academician A. I. Berg. Gosenergoizdat, Moscow-Leningrad, 1950.

TARAGOV, F. I.

Simple battery radio receivers Moskva, Gos. energ. Izd-vo, 1952. 31 p. Massovaia radiobiblioteka, vyp. 248) (54-18327)

TK6563.T3

KOMAROV, A.V.; LEVITIN, Ye.A.; TARASOV, F.I., red.; BABOCHKIN, S.N., tekhn.red.

[Radio receivers; the "Moskvich" radio receiver and the "Kama"  
radio-phonograph combination] Radioveshchatel'nye priyemniki;  
radiopriemnik "Moskvich," radiola "Kama." [Moskva, 1952] 11 p.  
(Massovaia radiobiblioteka, no.141) (MIRA 10:12)  
(Radio--Receivers and reception)

TARASOV, F. I.

DOROVATOVSKIY, P.S., redaktor; TARASOV, F.I., redaktor; LARIONOV, G.Ye.,  
tekhnicheskiiy redaktor.

[Radio amateurs' receivers constructed by B.N.Khitrov] Radioliubi-  
tel'skie priemniki B.N.Khitrova. Pod red. P.S.Dorovatovskogo.  
Leningrad, Gos. energ. izd-vo, 1952. 45 p. (Massovaya radiobibliote-  
ka, no. 163) (MLRA 7:9)  
(Radio--Receivers and reception)

KOSTANDI, G.G.; SPIZHEVSKIY, I.I., redaktor; ~~TARASOV, F.I.~~ redaktor;  
LARIONOV, G.Ye, tekhnicheskii redaktor

[Ultrahigh-frequency attachments] Ul'trakorotkovolnovye pristavki.  
Pod red. I.I. Spizhevskogo. Moskva, Gos. energ. izd-vo, 1953. 14 p.  
(Massovaya radiobiblioteka, no. 178) (MLRA 8:3)  
(Radio, Short wave)

TARASOV, F. I.

DOL'NIK, A.G.; EFRUSSE, M.M.; BERG, A.I., akademik, redaktor; SPIZHEV-  
SKIY, I.I., redaktor; TARASOV, F.I., redaktor; SKVORTSOV, I.M.  
tekhnicheskiy redaktor

[Automatic voltage regulator] Avtomaticheskii reguliator napria-  
zhenia. Pod red. I.I. Spizhevskogo. Moskva, Gos.energ.izd-vo,  
1953, 15 p. (Massovaya radiobiblioteka, no.186) [Microfilm]  
(Voltage regulator) (MLRA 8:10)

KERNOZHITSKIY, Ye.P.; TARASOV, F.I., redaktor; SNIZHEVSKIY, I.I., redaktor

[Table model radio phonograph with recorder] Nastol'naya radiola s  
magnitofonom. Pod red. I.I. Snizhevskogo. Moskva, Gos. energ. izd-vo,  
1953. 23 p. (Massovaya radiobiblioteka, no. 190) (MLRA 7:7)  
(Radio--Receivers and reception)  
(Magnetic records and recording)  
(Phonograph)

TARASOV, F.I.

LEVITIN, Ye.A.; BERG, A.I., redaktor; DEHIGIT, I.S., redaktor; YELIN, O.G., redaktor; KULIKOVSKIY, A.A., redaktor; MOSEVITSEV, B.N., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; SPIZHEVSKIY, I.I., redaktor; FRIDKIN, A.M., tekhnicheskii redaktor.

[Superheterodyne] Supergeterodin. Moskva, Gos. energ. izd-vo, 1954.  
11 p. (Massovaya radiobiblioteka, no. 200) [Microfilm] (MLRA 7:11)  
(Radio--Receivers and reception)



OYFA, I.L.; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G., redaktor; KULIKOVSKIY, A.A., redaktor; MOZHEKHEVELOV, B.N., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I. redaktor; MALININ, R.M., redaktor; FRIDKIN, A.M., tekhnicheskij redaktor.

[Intercom loud-speaker apparatus] Peregovornoe gromkogovoriashchee ustroystvo. Moskva, Gos. energ. izd-vo, 1954. 14 p. (Massovaya radiobiblioteka, no. 202) (MIRA 7:11)  
(Loud-speakers)

STARIKOV, I.G.; SPIZHEVSKIY, I.I., redaktor; TARASOV, F.I., redaktor;  
BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G., redaktor;  
KULIKOVSKIY, A.A., redaktor; SMIRNOV, A.D., redaktor; TRAMM, B.F.,  
redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; FRIDKIN,  
A.M., tekhnicheskiiy redaktor.

[Television set with few tubes] Malolampovyi televizor. Pod red. L.I.  
Spishavskogo. Moskva, Gos. energ. izd-vo, 1954. 37 p. (Massovaya  
radiobiblioteka, no.197) [Microfilm] (MLRA 7:12)  
(Television)

TARASOV, F.I.

NELEPETS, V.S.; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G., redaktor; KULIKOVSKIY, A.A., redaktor; MOZHEVVELOV, B.N., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; YAKOBSON, A.Kh., redaktor; FRIDKIN, A.M., tekhnicheskiy redaktor

[Radio engineering in railroad transportation] Radiotekhnika na zheleznodorozhnom transporte. Moskva, Gos. energ. izd-vo, 1954.  
43 p. (Massovaya radiobiblioteka, no. 196) [Microfilm] (MLRA 7:10)  
(Radio) (Railroads--Electronic equipment)

TARASOV, F.I.

GOL'DREYER, I.G.; YAKOBSON, A.Kh., redaktor; BERG, A.I., redaktor; DZHI-GIT, I.S., redaktor; YELIN, O.G., redaktor; KULIKOVSKIY, A.A., redaktor; MOZHEVELOV, B.N., redaktor; SMIRNOV, A.D., redaktor; ~~TARASOV~~, F.I., redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHAMMUR, V.I., redaktor; VORONIN, K.P., tekhnicheskiy redaktor.

[Feedback electronic cascades] Lampovyi kaskad s obratnoi svyaz'yu. Moskva, Gos. energeticheskoe izd-vo, 1954. 86 p. (Massovaya radio-biblioteka, no. 201) (MLRA 7:11)  
(Amplifiers, Electron tube)